



WESTERN RESOURCE ADVOCATES

Protecting the Interior West's Land, Air, and Water

December 30, 2008

Members of the Resource Development
Coordinating Committee
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Re: Comments on Proposed Mineral Lease of 37,083 Acres of Sovereign Lands Near
Dolphin Island, Great Salt Lake

Dear RDCC Members, Mr. Styler, Mr. Buehler and Mr. Grierson:

FRIENDS of Great Salt Lake, Bridgerland Audubon, Red Cliffs Audubon, Wasatch Audubon, League of Women Voters of Salt Lake, League of Women Voters of Utah, National Audubon Society, Utah Airboat Association, the Utah Chapter of the Sierra Club, Utah Rivers Council, and Utah Waterfowl Association provide the following comments on the nomination by Great Salt Lake Minerals ("Mining Company") of 37,083 acres of Great Salt Lake sovereign lands near Dolphin Island, for the mining of mineral salts. Mining Company seeks to lease over 37,000 acres in order to construct giant evaporation ponds on the mudflats and in shallow waters of Great Salt Lake, thereby converting huge areas of the Great Salt Lake Ecosystem currently available for wildlife and recreation into an industrialized mining operation.

In these comments, we focus on three central issues. First, we urge you to reject the latest Mining Company expansion proposal because the Division of Forestry, Fire and State Lands ("Division"), Resource Development Coordinating Committee ("RDCC") and other concerned state agencies currently lack the information necessary to determine the potential impacts of the development project on public trust values. Because the extensive industrialization of the Great Salt Lake Ecosystem entailed by this proposal is almost certain to have significant adverse impacts on navigation, wildlife habitat, aquatic beauty, public recreation, and water quality in Great Salt Lake, the State of Utah must catalog, analyze and disclose the impacts of the diking proposal before allowing leasing to proceed.

This is particularly true because this 37,000 acre proposal follows on the heels of a 33,000 acre expansion proposal, the impacts of which have not been inventoried or scrutinized. Indeed, the State of Utah has little or no information on the individual or cumulative impacts of the existing Mining Company operations which cover 43,000 acres of Great Salt Lake sovereign lands and has little or no information on the consequences of other mining operations in Great Salt Lake that have an existing industrialized footprint of tens of thousands of additional acres. Without this information, the State of Utah cannot live up to its constitutional and statutory obligations to ensure that no use of Great Salt Lake sovereign lands interfere with public trust values.

Second, we alert the Division and RDCC that approval of this massive project, particularly as it comes immediately after the Division's 2007 authorization of Mining Company's 33,000 acre expansion proposal, would flout and circumvent the role of the recently convened Great Salt Lake Advisory Council ("Council"), as well as the ability of this body to carry out the mandate Governor Huntsman assigned to it. The Governor created the Council to "make policy recommendations concerning the long-term viability of the entire Great Salt Lake ecosystem," and "facilitate orderly planning and development around the lake." To this end, the Council has unanimously agreed that a Great Salt Lake Commission ("Commission") is needed and that the overarching vision for the Commission would be to manage for the health of the physical and biological systems of the lake. As the Governor declared, the Council anticipates that the Commission would be endowed with duties that include conserving the natural resources of the lake, fostering coordination of relevant management and regulatory agencies, and monitoring and promoting responsible economic activity around the lake. The Commission would be served by a science advisory committee to help in its analysis of future proposals. See Executive Order Creating the Great Salt Lake Advisory Council, attached hereto as Exh. A; Great Salt Lake Advisory Council Meeting, December 9, 2008, attached hereto as Exh. B..

For several reasons, the 37,000 acre expansion proposal is exactly the type of project that should be addressed by the Commission. For example, the proposal has been advanced although there is little or no information – or monitoring data – on the individual or cumulative impacts of: 1) the planned 37,000 acre development; 2) the approved 33,000 acre development; 3) the existing 43,000-acre Mining Company development; or 4) the tens of thousands of acres of additional existing mineral salts mining activity around the lake. Similarly, based on the inevitable conclusion that individually and cumulatively these mining facilities and operations have had and will have an adverse effect on public trust values, the proposal clearly implicates the long-term viability of the lake and the Commission's obligation to conserve lake resources.

In addition, as the proposal has the potential to affect resources managed and regulated by several state agencies, consideration and analysis of the plan would be best left to the Commission, which would be charged with coordinating multiple agency oversight over and responsibility toward the lake. Finally, the Division and the Department of Natural Resources have taken the official position that members of the public are denied access to administrative review of leasing decisions such as that before RDCC. In contrast, the Council recognizes the strong need for and the propriety of public participation in decision-making that affects the lake. Rejecting the current proposal until the Commission can address it would reinstate the public role in management decisions that impact public trust resources and would encourage public interest in one of Utah's most prized treasures – the Great Salt Lake Ecosystem.

Third, we hope to notify the Division and RDCC members of the legal requirements and opportunities relative to existing leases for mineral salts extraction in Bear River Bay. As Mining Company made clear in its Potassium Sulfate Expansion Plan, it also intends to expand its industrial operations to include 8,000 acres of critically important wildlife habitat in Bear River Bay. At the same time, Mining Company is seeking to increase its mining facilities by an additional 62,000 acres.¹ All salts concentrated outside of Bear River Bay by Mining Company operations are eventually brought into the Bay for further processing in the evaporation ponds located there. Huge volumes of salts and other residue that remain are then flushed into Bear River Bay. In other words, Mining Company's current proposal is directly linked to its other proposed expansions, and will impact Bear River Bay. Thus, diking of Bear River Bay should be analyzed for what it in fact is: not an isolated project but an integral part of Mining Company's 62,000 acre expansion.

Moreover, the 37,000 acre expansion currently before RDCC will necessarily have adverse impacts on Bear River Bay. Therefore, the required analysis of the proposal must include consideration of the impacts to Bear River Bay. In addition, we remind you that the Bear River Bay leases slated for development were issued in the mid-1960s and have not been subject to any environmental analysis or planning in the over 40 years since their issuance, much less to any determination whether leasing and development of these lands is in keeping with the State of Utah's public trust responsibilities. Because these responsibilities must be met and public trust values must be protected, we point out various opportunities which will allow the Division particularly, and the State of Utah generally, to fulfill its public trust duties relative to these lands. We urge the Division and RDCC members to take advantage of these mechanisms so that they can comply with their obligation to safeguard the sovereign lands of Great Salt Lake.

To explain our position more fully we make the following points in detail below:

- First, we give a brief overview of Mining Company's development proposal, establishing the magnitude of the plan to industrialize 37,000 additional acres of the bed of Great Salt

¹ In 2007, the Division approved the 33,000 acre expansion proposal, which includes the 8,000 acres in Bear River Bay. Therefore, adding the 23,000 acres of expansion outside of Bear River Bay to the current 37,000 acre proposal means that the Mining Company is planning on increasing the footprint and scope of its current mining operations by at least 70,000 acres, 8,000 of which is in Bear River Bay.

Lake on top of the approved expansion proposal impacting 33,000 acres. This 70,000 acre expansion will be added to Mining Company's existing 43,000 acre facilities. We also point out that these proposals are inseparably connected to the proposal to expand development in the Bear River Bay by 8,000 acres, as well as plans to relocate, deepen and lengthen the southern portion of the existing inlet canal that transports water to the solar evaporation pond in Clyman Bay.

- Second, we set forth the State of Utah's legal responsibilities in managing Great Salt Lake – both its public trust responsibilities and its site-specific planning obligations that are implicated by this nomination. This analysis underscores that while the Division may be ultimately responsible for managing Great Salt Lake in keeping with the public trust, the public trust obligation applies to all relevant agencies of the State of Utah, including the Division of Wildlife Resources and the Division of Water Quality.
- Third, we examine current planning efforts relevant to Great Salt Lake and mineral development of the lake, noting that the planning documents:
 - do **not** undertake site-specific analysis, much less analysis sufficient to allow the Division and RDCC members to evaluate the nomination or fulfill their public trust obligations;
 - underscore that development proposed by the Mining Company promises to have significant adverse impacts on public trust resources – impacts that the documents did **not** then analyze; and,
 - are out-of-date and fail to address significant new issues relevant to the fulfillment of the public trust obligation.
- Fourth, we note that, in 2006, the Division entered into a signed and legally binding agreement with FRIENDS and others which stated that the Division “shall” reconsider and reissue the Great Salt Lake Mineral Leasing Plan. The Division further committed that this review would involve the public and RDCC and would include a reexamination of whether mineral leasing and development of areas of Great Salt Lake would impermissibly interfere with public trust values. This has yet to occur.
- Fifth, we underscore the many significant adverse impacts to public trust values that will occur as a result of the proposed 37,000 acre development plan. We emphasize that other recently approved and planned projects – the 25,000 acre expansion in Clyman Bay, the 8,000 acre expansion in Bear River Bay and the deepening of the canal that feeds the Clyman Bay ponds – are essentially a single, coordinated project. In any case, the cumulative impacts on public trust values of these proposals along with existing mining operations around the lake must be considered prior to any approval of the 37,000 expansion.
- Sixth, we call attention to the fact that there are many unknowns about the purported lease relinquishment and that the alleged benefit of this action is not understood or quantified. Moreover, we stress that the impacts on trust resources of the proposed 37,000 acre expansion are not known and that these effects are likely to be significant. As a result, the leasing proposal must be analyzed thoroughly, regardless of any attendant relinquishment. Only in this way can the State determine whether the planned leasing and development would interfere with public trust resources and therefore violate the public trust doctrine.
- Seventh, we point out that even if the entire 37,000 acre proposal were subject to environmental review by the U.S. Army Corps of Engineers, it is incumbent upon the

State of Utah to fulfill its public trust obligations. We therefore repeat the need for the Division and RDCC to:

- collect and acquire sufficient analysis to set forth appropriate protective lease stipulations and restrictions prior to offering the 37,000 acres of sovereign lands for leasing, or decide not to offer the lands for leasing if no stipulations could adequately protect the public trust resources; and,
 - with opportunity for public comment, collect and acquire additional information – prior to committing the State to allowing **any** development on the existing or proposed leases – of sufficient breadth and detail to allow the Division and RDCC to determine whether the proposed development will impair public trust resources.
- Eighth, we reiterate the significant value the Division of Wildlife Resources and others have ascribed to Bear River Bay and the particular areas slated for diking and conversion. Moreover, development of the 37,000 will necessarily impact Bear River Bay by increasing the flow of salts to that waterbody. We also repeat that, while the consensus is that development of these parcels threatens the public trust, no public trust analysis has been undertaken with regard to these parcels. We therefore point out opportunities that will allow compliance with public trust obligations in the context of the existing leases and existing planning documents.
- Ninth, we conclude by reiterating the need for the Division and the RDCC members to acquire and analyze the information they need to ensure that the entire proposed diking and conversion expansion will not harm the public trust values they are statutorily required to protect.

Finally, we have attached as exhibits hereto RDCC comment letters on this proposal from the following individuals and entities:

- Al Trout, Manager of Bear River Migratory Bird Refuge, 1989 to 2006 (Exh. C)
- R. Jefre Hicks, Utah Airboat Association (Exh. D)
- John D. Ray, Utah Waterfowl Association (Exh. E)
- Don Paul, Utah Division of Wildlife Resources, 1968 to 2002 (Exh. F.)
- Dr. Steven R. Simms, Professor of Anthropology, Utah State University (Exh. G)
- Dr. John F. Cavitt, Professor of Zoology, Weber State University (Exh. H)

We hereby reference and incorporate herein these comments and request (1) that the Division and RDCC carefully examine and consider the points made in these letters; and (2) that the Division respond to each of the comments made in each of these letters.

We have also attached two comment letters which have we submitted to the U.S. Army Corps of Engineers: (1) Comments on Proposed 33,000 Acre Expansion of Solar Evaporation Ponds on Great Salt Lake (SPK-2007-00121), National Audubon, *et al* (December 3, 2007), attached hereto as Exh. I; and (2) Comments on Proposed Water Delivery Canal Project (SPK 2008-00268), National Audubon, *et al* (April 16, 2008), attached hereto as Exh. J. We hereby reference and incorporate herein these comments and request that the Division and RDCC carefully examine and consider the points made therein. Finally, we hereby reference and incorporate the comments contained in the April 25, 2007 letter National Audubon and others

submitted to RDCC regarding the Mining Company's 33,000 acre expansion proposal, as well as all attached exhibits.

1. The Mining Company Expansion Proposal

Currently, Mining Company operates 43,000 acres of solar evaporation ponds on Great Salt Lake sovereign lands. According to the company, this includes 21,000 acres of salt ponds in Clyman Bay on the west side lake, a 21 mile long canal running along lake bottom from west to the east side of Great Salt Lake, and 22,000 acres of solar ponds in Bear River Bay on the east side of the lake.

To this existing 43,000 acre facility, Mining Company plans to add 33,000 acres of industrial development. On the west side, in Clyman Bay, the company proposes to build an additional 18,000 acre solar pond, and a new 7,000 acre pond, as well as a new feed canal into the lake and a new pump station powered by a diesel engine. The company maintains that it currently leases much of the land necessary to build this 7,000 acre pond and what it does not lease is presently leased by a private individual. In 2007, the Division approved Mining Company's application to lease approximately 23,088 acres to facilitate this expansion of the west side of the lake that is now before the RDCC. On the east side of the lake, in Bear River Bay, the company intends to build a new 8,000 acre solar pond. Mining Company contends that it currently holds leases sufficient to construct this 8,000 acre pond in Bear River Bay.

Also on the drawing board and currently pending before the Army Corps of Engineers is Mining Company's proposal to relocate and lengthen the southern portion of the existing inlet canal that transports water to the solar evaporation ponds in Clyman Bay. In addition, Mining Company proposes to deepen the canal to an elevation of 4188 so that there is continued water flow as lake levels decrease to an approximate elevation of approximately 4193 feet above sea level.

The conservation community has major concerns regarding the above proposals and has commented extensively on both of them. A letter was provided to RDCC regarding the expansion proposal on April 25, 2007. On December 3, 2007, National Audubon *et al* submitted scoping comments to the U.S. Army Corps of Engineers regarding Mining Company's 33,000 acre expansion proposal. On April 16, 2008, comments were submitted to that agency regarding the proposal to relocate, deepen and lengthen the inlet canal. In order to provide a full background on these concerns, we have attached copies of these scoping comments hereto. See Exhs. I and J.

On top of all this existing and approved development, Mining Company now proposes to add an additional 37,000 acres of mining facilities on the west side of Great Salt Lake surrounding Dolphin Island. Purportedly, Mining Company has agreed to relinquish 30,000 acres of leases as part of this proposal. However, it appears that significant acreage involved in that relinquishment will remain open to mineral salts leasing and other development such as oil and gas development.

In sum, the Division has approved leases which will allow Mining Company to expand its 43,000 acre operation by 25,000 acres² on the west side and 8,000 acres on the east side, for a total expansion of 33,000 acres. Currently pending is a proposal that would entail the industrialization of an additional 37,000 acres of sovereign lands. This means that Mining Company proposes to have under development 113,000 acres or **177 square miles** of the bed of Great Salt Lake – an area larger considerably larger than Salt Lake City, which is 110 square miles – an area that takes up almost **20 percent** of the total area of the lake when waters are low, and covers **10 percent** of the lake when its levels are average.³ Because the existing and proposed development is concentrated in the north arm of the lake and in Bear River Bay, the impacts of the mining operations will be felt even more acutely in that part of the lake. By the same token, the mining operations take place largely on mudflats and shallow waters near the shoreline of the lake. This means that the impacts of the mining operations will be concentrated in these valuable ecosystems.

2. The Division's Legal Responsibilities

The State of Utah and each of its executive agencies have unique obligations to protect sovereign lands, such as the bed of Great Salt Lake, and the Public Trust values they support. Under Article XX § 1 of the Utah Constitution, sovereign lands are held in public trust.⁴ The Utah Supreme Court has interpreted the Public Trust Doctrine, which sets forth federal and state law with regard to sovereign lands, as follows:⁵ “The essence of this doctrine is that navigable waters should not be given without restriction to private parties and should be preserved for the general public for uses such as commerce, navigation, and fishing.” Colman v. Utah State Land Board, 795 P.2d 622, 635 (Utah 1990) (citing Illinois Central R.R. Co. v. Illinois, 146 U.S. 387, 13 S.Ct. 110 (1892) as “the controlling case” on Public Trust). The Utah Supreme Court later elaborated that “[t]he ‘public trust’ doctrine . . . protects the ecological integrity of public lands and their public recreational uses for the benefit of the public at large.” National Parks and

² According to Mining Company, the total proposed expansion for the west side of the lake will cover 25,000 acres. However, 1,500 acres that is slated to be used for this development is already leased to a private entity. As a result, Mining Company is nominating 23,088 additional acres for leasing in this area.

³ Great Salt Lake has an historic average (1847-1986) surface elevation of 4,200 feet. At this elevation, the lake covers an area of about 1,700 square miles. At the historic low elevation of 4,191.35 in 1963, the lake covered only 950 square miles.

⁴ This constitutional provision states: “All lands of the State that have been, or may hereafter be granted to the State by Congress, and all lands acquired by gift, grant or devise, from any person or corporation, or that may otherwise be acquired, are hereby accepted, and, except as provided in Section 2 of this Article, are declared to be the public lands of the State; and shall be held in trust for the people, to be disposed of as may be provided by law, for the respective purposes for which they have been or may be granted, donated, devised or otherwise acquired.”

⁵ There is some debate as to whether the Public Trust Doctrine finds its origins in federal common law or federal constitutional law – particularly the “Equal Footing Doctrine.” See Illinois Central R.R. Co. v. Illinois, 146 U.S. 387, 13 S.Ct. 110 (1892); National Parks and Conservation Ass’n v. Board of State Lands, 869 P.2d 909, 919-920 (Utah 1993). In any case, the Utah Supreme Court has found that this doctrine applies to Utah’s sovereign lands.

Conservation Ass'n v. Board of State Lands, 869 P.2d 909, 919 (Utah 1993) (citing Colmar, 795 P.2d at 635-36).

Illinois Central characterized the Public Trust Doctrine as:

a title held in trust for the people of the state, that they may enjoy the navigation of the waters, carry on commerce over them, and have liberty of fishing therein, freed from the obstruction or interference of private parties. The interest of the people in the navigation of the waters and in commerce over them may be improved in many instances by the erection of wharves, docks, and piers therein, for which purpose the state may grant parcels of the submerged lands; and, so long as their disposition is made for such purpose, no valid objections can be made to the grants. It is grants of parcels of lands under navigable waters that may afford foundation for wharves, piers, docks, and other structures in aid of commerce, and grants of parcels which, being occupied, do not substantially impair the public interest in the lands and waters remaining, that are chiefly considered and sustained in the adjudged cases as a valid exercise of legislative power consistently with the trust to the public upon which such lands are held by the state.

Illinois Central R.R. Co. v. Illinois, 146 U.S. at 452; 13 S.Ct. at 118.

Case law in the states has uniformly required that state-owned submerged lands be alienated or encumbered only for public purposes. See Kootenai Envtl. Alliance, Inc. v. Panhandle Yacht Club, Inc., 105 Idaho 622, 671 P.2d 1085, 1089 (1983) (grant of public trust property must be made in "aid of navigation, commerce, or other trust purposes."); Morse v. Oregon Division of State Lands, 285 Or. 197, 590 P.2d 709 (1979) (fill may be for non-water-related purposes so long as public need for project outweighs interference with traditional trust purposes); State v. Public Service Commission, 275 Wis. 112, 81 N.W.2d 71, 73-74 (1957) ("In [upholding a grant of an interest in submerged lands], we attach importance to these facts: (1) Public bodies will control the use of the area. (2) The area will be devoted to public purposes and open to the public (4) No one of the public uses of the lake ... will be destroyed or greatly impaired. (5) The disappointment of those members of the public who may desire to boat, fish or swim in the area to be filled is negligible when compared with the greater convenience to be afforded those members of the public who use the city park."); City of Berkeley v. Superior Court of Alameda County, 26 Cal.3d 515, 162 Cal.Rptr. 327, 606 P.2d 362, 373 (1980) ("[The] principle we apply is that the interests of the public are paramount in property that is still physically adaptable for trust uses"); see generally *The Public Trust Doctrine in Natural Resources Law and Management: A Symposium*, 14 U.C.Davis L.Rev. 181 (1980).

Utah statutes, which must be interpreted as consistent with Utah case law, in turn provide that the Division "may exchange, sell, or lease sovereign lands **but only in the quantities and for the purposes as serve the public interest and do not interfere with the public trust.**" Utah Code Ann. § 65A-10-1(1) (emphasis added). Utah regulations interpreting this provision state:

The state of Utah recognizes and declares that the beds of navigable waters within the state are owned by the state and are among the basic resources of the state, and that there

exists, and has existed since statehood, a public trust over and upon the beds of these waters. It is also recognized that the public health, interest, safety, and welfare require that all uses on, beneath or above the beds of navigable lakes and streams of the state be regulated, so that the protection of navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality will be given due consideration and balanced against the navigational or economic necessity or justification for, or benefit to be derived from, any proposed use.

Utah Admin. Code R652-2-200.

These provisions, understood in the context of the mandates laid down by the Utah Supreme Court, require first and foremost that sovereign lands and the values they embody – navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality – must be protected and cannot be interfered with. E.g. NPCA v. Board of State Lands, 869 P.2d at 919 (“The ‘public trust’ doctrine . . . protects the ecological integrity of public lands and their public recreational uses for the benefit of the public at large.”); Utah Code Ann. § 65A-10-1(1) (sovereign lands may be leased “only in the quantities and for the purposes as serve the public interest and do not interfere with the public trust.”). Alienation of or encumbrances on sovereign lands are only appropriate if they directly serve public purposes that enhance or aid public trust values – navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality. Illinois Central R.R. Co. v. Illinois, 146 U.S. at 452; 13 S.Ct. at 118.

Moreover, any purported benefit to the trust resources must be direct and identifiable. This means that, to be considered as a benefit to the trust, any alleged economic gain must directly benefit navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality. Economic gains to the state economy or to state coffers are not appropriately considered as a benefit to the trust.

Finally, purely private uses of the trust, essentially to the exclusion of public access use and enjoyment of public trust values, are almost certainly prohibited under Utah law. This is true even where those uses benefit the Utah economy and/or lead to royalties. Such private, consumptive uses cannot be equated with public uses of sovereign lands, and must, almost always, be rejected as an improper burden on public trust resources.

The Division's Sovereign Land Management Planning Regulations

To help ensure that the Division manages Great Salt Lake according to its public trust responsibilities, the Division must undertake resource planning. To this end, Division regulations state that “[s]ite-specific planning shall be initiated either by: (a) an application for a sovereign land use, or (b) the identification by the division of an opportunity for commercial gain in a specific area.” Utah Admin. Code R652-90-300(2).

Site-specific planning entails, inter alia: “(a) a comparative evaluation of the commercial gain potential of the proposed use with competing or existing uses; (b) the effect of the proposed use on adjoining sovereign lands; (c) an evaluation of the proposed use or action with regard to natural and cultural resources, if appropriate; (d) the notification of, and environmental analysis

of, the proposed use provided by the public, federal, state and municipal agencies through the Resource Development Coordinating Committee (RDCC) process; and, (e) further notification and evaluations as required by applicable rules.” Utah Admin. Code R652-90-400.

In turn, the RDCC process “provides an environmental assessment for purposes of sovereign land management.” Utah Admin. Code R652-90-1200. Importantly, “[t]he public may comment on proposed sovereign land uses through the RDCC and other public notification processes.” *Id.* In addition, upon the completion of the site-specific planning process, the public “shall” be provided with the “Record of Decision or other document summarizing final division action and relevant facts document” Utah Admin. Code R652-90-600(3).

Finally, Rule R652-90-400(e) obligates the Division, as part of its site-specific planning, to undertake “evaluations as required by applicable rules.” This means that, as part of its planning, the agency must complete the analysis required by Utah Admin. Code R652-2-200 (“all uses on, beneath, or above the beds of navigable lakes . . . [shall] be regulated, so that the protection of navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality will be given due consideration and balanced against the navigational or economic necessity or justification for, or benefit to be derived from, any proposed use”). Thus, the Division must determine the supposed benefit of a proposed use, as well as the cost or impact to public trust resources that would result from that use. In other words, to determine if a use is appropriate, the harms and benefits must be balanced under the mandate of the Public Trust Doctrine – that the proposed use may **not** impair navigation, fish and wildlife habitat, aquatic beauty, public recreation, or water quality in the lake.

3. Past Planning Efforts

The CMP and MLP Are Not Site-Specific.

The Division undertook to update its management plan for Great Salt Lake by releasing the Draft Great Salt Lake Comprehensive Management Plan (“Draft CMP”) on November 3, 1999. On March 1, 2000, the Division released its Great Salt Lake Comprehensive Management Plan and Decision Document (“CMP Decision Document”). This and related documents (collectively “Plans”), such as the May 1, 2000 CMP Resource Document, were subject to public notice and comment, and the opportunity for appeal. The CMP Decision Document incorporated the June 27, 1996 Mineral Leasing Plan for Great Salt Lake (“MLP”) and made the decision to “open” portions of Great Salt Lake to mineral salts leasing and to prohibit leasing in other portions. CMP Decision Document at Exhibit 4. Leases in these open areas contain no stipulations. *Id.* The proposed 23,088 acre Clyman Bay expansion appears to be proposed for areas designated as open. However, the Bear River Bay expansion – apparently already leased by Mining Company – is proposed for an area closed to mineral salts leasing.

The Division’s own management planning regulations **require** the Division to undertake site-specific planning relative to any application “to use” sovereign lands, including Mining Company’s application to lease and develop Clyman and Bear River Bays for mining. Utah Admin. Rule 652-90-300(2)(a) (1996) (site-specific planning shall be initiated by application for

sovereign land use). Accordingly, the Plans promise site-specific planning in response to any applications to use Great Salt Lake:

Permits, leases and other authorizations are issued following two general procedures. The first is over-the-counter transactions which are largely administerial [sic] in nature. . . . Other actions like easements, special use leases and exchanges trigger a site-specific planning process and the preparation of a record of decision.

Draft CMP at 152. Similarly, in response to public comment, the Division states in the context of "sovereign land classifications," that "[a]s site-specific planning is conducted in response to applications submitted that affect the development areas," protection of wildlife values "will be taken into account." CMP Decision Document at Record of Decision 7 (citing Alternative A, Issue 5.1, R. 931); *see also id.* (relative to "mineral leasing zones," stating "site-specific planning may lead to revisions of the MLP" to safeguard wildlife values) (citing Alternative A, Issue 5.1 & 6.1, R. at 931-32); *id.* (protection of recreation opportunities to be addressed in site-specific planning.); CMP Decision Document at 18 (requiring site-specific planning relative to geologic hazards).⁶

The CMP Identifies, but Fails to Analyze Threats Posed by Diking and Mineral Salts Extraction.

In addition, the Division concedes, in the Plans, that it lacks the information necessary to determine the extent of adverse impacts from future mining activities and promises it will acquire and consider the necessary information prior to making any decisions regarding specific proposals to dike and mine Great Salt Lake sovereign lands. Acknowledging that there are currently 171,644 acres of the bed of Great Salt Lake under lease and development for mineral salts extraction, R. 491, the Division admits that

Mineral operations can have significant impacts . . . through diking projects, pollution, depletion of salts in the lake, disturbance of bird populations, and other activities. The

⁶ It is indisputable that the Plans are **not** site-specific and do **not** anticipate, much less analyze, the impacts on trust resources from the industrial development of Clyman and Bear River Bays. For example, the Plans assume that little or no development in Clyman Bay will occur. *See, e.g.,* CMP Decision Document at 18. As a result, the Plans do not consider the proposed Clyman Bay development site as a potential ponding location (MLP at 13), do not consider constraints on development of this site (MLP at 31) and do not designate the area of the proposed development as having "no apparent conflicts." *Id.* Moreover, while the Plans do identify significant threats to public trust values from diking and mining, the Plans do **not** explore these threats generally, much less specifically with regard to the Mineral Company expansion plan. *See, e.g.,* MLP at 24 (minerals extraction increasingly in conflict with lake resources); *Id.* at 29 (increasing demands on lake resources pose potential conflicts with mineral development); *Id.* at 30 (listing potential conflicts that exist between ponding systems and trust resources); *Id.* at 33 ("Mineral development and construction of dikes would impact areas that are used by wildlife at some time during the lake's cycle."); CMP Decision Document at 15 ("Evaporation ponds can increase salinity to the point that shoreline habitat is lost."); *Id.* at 20 (even minimal human presence has been shown to disrupt American white pelicans).

impact of mineral operations is not systematically documented nor are parameters or indicators set up which would signal if and when and to what degree a change in leasing and regulatory policies or direction might be necessary.

MLP at 41; *see also* CMP Decision Document, Record of Decision at 7 (“better evaluation of diking proposals is needed than has occurred in the past.”); MLP at 10 (“placement of dikes and diversions can have significant and rapid impacts on various conditions in the lake.”). In response to these unknown threats, the Division explicitly states that “at the time of proposed development, [it will] examine the need and/or alternatives for dikes and other structures . . . to accommodate all affected resources, economic development, water level management, wildlife, navigability and other issues.” MLP at 45.

Ultimately, acknowledging that site-specific analysis of new mining proposals is necessary, the Division formally adopts the Great Salt Lake Diking Policy (“Policy”). This Policy “require[s] assessment of wetland, wildlife habitat, lake level, water quality, navigation and other management impacts **for each diking proposal** [to] [i]nclude cumulative impact assessment.” Draft CMP at 167 (emphasis added); CMP Decision Document, Record of Decision at 1210 (adopting Alternative A); CMP Decision Document at 33 *see also* R. at 1235 (“GSL diking policy. Given the increased appreciation for habitat-related beneficial effects of fluctuating lake levels, the objective is to ensure that on-site and off-site impacts will be taken into account when diking activity is planned.”).

Importantly, the Policy also dictates that the Division will “[e]valuate opportunities for trading existing leases with significant resource conflicts for the right to lease in areas with less conflict.” MLP at 45. Thus, the MLP requires, at a minimum, an examination of the environmental impacts from diking and an evaluation of opportunities to exchange leased parcels in sensitive areas.

Thus, it is wrong to argue that the Plans effectively made the decision to lease any nominated lands located in areas of Great Salt Lake open to mineral salts mining. The Plans made no such commitment, but instead identified significant conflict between mineral salts mining and the protection of public trust resources and promised site-specific planning, including a complete public trust analysis of the individual and cumulative impacts of any particular mining proposal.⁷

The CMP Fails to Consider New Information and Fails to Analyze Significant Likely Impairments to the Public Trust

New information

Since the CMP was finalized, significant new information regarding Great Salt Lake and its public trust resources has come to light. For example, federal scientists have discovered

⁷ Of course, even if the Plans did not make this commitment, the Division would be obligated to undertake this analysis to comply with its planning responsibilities and to ensure that any mining activity would not interfere with public trust values. *See* Utah Code Ann. § 65A-10-1 (2008).

alarmingly high levels of methylmercury in the water of Great Salt Lake. These levels represent some of the highest levels of this toxin ever discovered by the U.S. Geological Survey ("USGS"). Toxic levels of mercury have also been found in Great Salt Lake waterfowl, such as northern shovelers and common goldeneyes, in such high concentrations that the Division of Wildlife Resources warned the public not to shoot or consume waterfowl from these two species. In addition, possible selenium contamination in the lake has prompted state and federal agencies, along with the public, to begin the extensive process of determining a lake-specific numeric water quality standard for this pollutant. At the same time, another USGS study has shown high levels of contaminants in the bed of the lake.⁸ These discoveries sound an alarm about water quality, casting serious doubt on the assumption that areas of the lake's deep brine layer will hold contaminants and keep them inert, and suggesting that disturbing lake sediments could be significantly detrimental to water quality.

Significant information relating to public trust values not analyzed

There is also significant information directly relevant to protection of the public trust values that has never been analyzed either generally as part of a mineral leasing program or on a site-specific level. In other words, information concerning a myriad of issues does not appear in the CMP and related documents, or in any other report, study or planning record. This means that, to ensure the protection of navigation, wildlife habitat, aquatic beauty, public recreation, and water quality, this information must be gathered and analyzed prior to any determination of whether the diking and conversion proposal violates the public trust.

As a general matter, there is little or no information, studies, data or analysis quantifying the impacts that the construction and operation of the existing Mining Company facilities have on public trust values. Indeed, according to the MLP, there are currently ten producing mineral leases totaling 171,644 acres operating within Great Salt Lake. MLP at 20. Like Mining Company's expansion proposal, these operations involve diking and conversion of a functioning ecosystem into solar evaporation ponds and similar industrial facilities. Yet, as the MLP admits, while "[m]ineral operations can have significant impacts . . . [t]he impact of mineral operations is not systematically documented nor are parameters or indicators set up which would signal if and when and to what degree a change in leasing and regulatory policies or direction might be necessary." MLP at 41. This same lack of information and analysis applies to the Division's approval of the 33,000 acre expansion proposal, as well as the proposed trench and the environmental impact of flushing Bear River Bay evaporation ponds, given that the volume of salts and water use will increase significantly with the proposed development.

Plainly, without this baseline data – without knowing if current mineral leasing is adversely impacting public trust resources – the Division is not in a position to evaluate whether expansion of these operations will negatively affect navigation, wildlife habitat, aquatic beauty, public recreation, and water quality. Moreover, given the sheer magnitude of current operations and the proposed expansion, it is almost certain that cumulatively, these diking and conversion operations are significantly impairing the public trust. This is particularly true given that, once

⁸ Reconstructing Historical Changes in the Environmental Health of Watershed by Using Sediment Cores from Lakes and Reservoirs in Salt Lake Valley, Utah (December 2000).

developed, the expansion parcels are likely to remain diked and converted indefinitely, meaning that adverse impacts to public trust values will extend into the foreseeable future and will certainly have cumulative impacts over time.

4. The 2006 Division Promise to Reexamine the Mineral Leasing Plan

In 2006, the Division entered into a signed and legally binding agreement with FRIENDS and others, which stated that the Division “shall reconsider and reissue the Great Salt Lake Mineral Leasing Plan.” The Division further committed that this review would involve the public and RDCC and would include a reexamination of whether mineral leasing and development of areas of Great Salt Lake would impermissibly interfere with public trust values:

The Division shall reconsider and reissue the Great Salt Lake Mineral Leasing Plan of June 27, 1996. . . . At a minimum, the Division will determine if leasing and development of any specific area of the bed of Great Salt Lake open to leasing interferes with or served the public trust . . . recognizing that [any] permitted use cannot interfere with these resources.

Thus, in 2006, the Division not only acknowledged that the MLP was out of date and perhaps inadequate to protect public trust values, but committed to undertaking a public process to reevaluate and reconsider the decisions made in that document, along with the analysis on which the agency relied to come to its conclusions.

5. The 37,000 Acre Development Will Interfere with Public Trust Resources.

The 37,000 acre development of sovereign lands around Dolphin Island will have many significant adverse impacts on public trust values. Moreover, other recently approved and planned projects – the 25,000 acre expansion in Clyman Bay, the 8,000 acre expansion in Bear River Bay and the deepening of the trench that feeds the Clyman Bay ponds – are essentially a single, coordinated project. In any case, the cumulative impacts on public trust values of these proposals, along with existing mining operations around the lake, must be considered prior to any approval of the 37,000 expansion.

Specifically, the following is a list of issues relevant to the individual and cumulative impacts and impairments that will almost certainly result from the proposed mining industry expansion:

- **Impacts to navigation, public access and public recreation:**

- Increased diking, industrialization and destruction of affected ecosystems will further limit navigation of and public access to the shoreline, as well as previously open waters of Great Salt Lake. This will in turn limit the ability of the public to recreate freely on the lake and will concentrate the public’s use in a smaller area. This in turn will adversely impact navigation and recreation in these remaining smaller areas.

- To the extent increased diking, industrialization and destruction of the Great Salt Lake Ecosystem will adversely affect water birds and wildlife, as well as scenic values, public recreation that depends upon these values will be adversely impacted.
- Impacts to navigation and public access will be exacerbated by low water as lake volume decreases and the shoreline shrinks.
- Increased diking and industrialization will further impede navigation and access from one part of the lake to the other – access which is already significantly impaired by existing diking and industrialization.

■ **Impacts on wildlife habitat:**

- Increased diking, industrialization and destruction of the Great Salt Lake Ecosystem will further concentrate usage in non-developed areas, thereby impacting wildlife habitat in these areas.
- Dolphin Island, surrounded by the 37,000 acre expansion proposal, may possess value in part because it is connected to land. In any case, the impact to wildlife of flooding this area with highly concentrated brines must be determined.
- The proposed expansion has the potential to impact adversely other bird life. There has been no analysis of the impact of development on the eared grebe and other birds that depend upon the north arm during periods of flood, estimated by the Division to be approximately 10% of the time. In high precipitation years, as fresh water decreases salinity in the north and south arms, brine shrimp production in the north arm will exceed that in the south arm, and birds such as the eared grebe, Wilson's phalaropes and red-necked phalaropes will necessarily rely on the ecosystem of the north arm. The same may also be true for waterfowl. By the same token, the evaporation ponds will be in place for several decades. Within that time frame, the causeway could be breached or actions taken to better circulate the lake's waters. Again, the north arm could become even more important to birds such as the eared grebe and other birds that use the open waters of the lake.
- As the proposed 37,000 acre expansion would also dike off about several miles of shoreline on the western side of Gunnison Bay, it may adversely impact birds such as the snowy plover. Bird use in this area is largely unknown, but may well be important. The potential impacts to bird life and other flora and fauna in this area should be fully explored.
- Any impact to wildlife habitat caused by increased diking, industrialization and destruction of the Great Salt Lake ecosystem is likely to be exacerbated by low water conditions.
- Adverse impacts to water quality and decreases in water quantity will adversely affect wildlife and wildlife habitat.

■ **Impacts to aquatic beauty:**

- Diking, industrialization and destruction of the Great Salt Lake Ecosystem modify a natural setting, making it a developed site. Thus, the impact of the proposed

expansion on the aquatic beauty of Great Salt Lake is extensive. Cumulatively, this impact is even more significant, as a significant portion of the lake is currently developed.

■ **Impacts on water quality, water movement and water quantity:**

- Diking, industrialization and destruction of the Great Salt Lake Ecosystem impacts water quality because it interferes with the natural ebb and flow of the lake, as well as the mixing of the lake's waters. The proposed development would enclose 37,000 acres of water, as well as dike off several miles of shoreline on the western side of Gunnison Bay. The effects of this expanded development on water quality, together with the effects of current development, are almost certainly significant.
- Mineral salts extraction changes the chemistry of the waters of Great Salt Lake, at the very least, on a local level. These changes – including the effects of increased concentrations of some minerals and decreased concentrations of others – and the impacts these changes may have on the biota of the lake have never been analyzed. Changes to water chemistry, both due to current mineral extraction and due to the impacts of increased extraction should be addressed, particularly as these changes impact algae, brine shrimp and water birds. In addition, more salts are extracted from the lake every year than are added by river inflows; therefore, the long-term extraction of minerals – which is likely to change the chemistry and ultimately the characters of the lake – should be evaluated.
- Diking and the operation of solar evaporation ponds will increase evaporation from the lake with unknown impacts to water availability, water quality, wildlife habitat, wetlands and mud flats. This increase in evaporation and decrease in lake volume has the potential to occur on a significant scale with significant adverse impacts on water quality, Gunnison Island, navigation, aquatic beauty and recreation. The proposal to deepen the Gunnison Bay trench suggests that water will be withdrawn from the lake and sequestered in ponds as the elevation of the waters of the lake recede to approximately 4193.
- The expansion proposal will greatly increase the ongoing shift of minerals between Gunnison Bay and Bear River Bay, and also possibly Gilbert Bay. A full understanding of these possible shifts in minerals and their impacts to the various bays should be developed, including whether the movement of water and minerals could concentrate mercury or selenium in the receiving waters or in the waters from which the minerals and water are being removed. These effects should be quantified and analyzed.
- Drought and low water will further exacerbate the water quality impacts of current and proposed operations. In addition, as the population of the Wasatch Front increases, there will be more demand for fresh water, likely resulting in less water reaching Great Salt Lake.
- Construction of the dikes and trenches will disturb lake bed sediments and stir up contaminants. In addition, the use of motors, motorized vehicles and other equipment as a result of the development could adversely impact water quality.

- Pumps, underwater canals, water intake points and discharge points all impact water quality, individually and cumulatively. Flushing of solar ponds impacts water quality by forcing into specific parts of the lake waters containing a high concentration of unspecified minerals.
- Removal of extremely high volumes of water from the open waters of the lake and sequestering them in largely sterile evaporation ponds affects water quality and quantity available to the Great Salt Lake Ecosystem. Moreover, increased evaporation of waters from the lake which will result from the construction of ponds, will also impact these values. This loss of water could lower lake levels thereby further concentrating pollutants, further restricting natural water flows as well as public access.
- For example, the expansion proposal will greatly increase the impact of flushing on Bear River Bay. A significant increase in volume of brines will be transported to and eventually flushed into the Bay. This activity is not understood. However, there is evidence that this flushing creates dead zones in Bear River Bay where vegetation is eradicated and unable to reestablish for many years. Moreover, the flushing and diking disrupts the flows of relatively fresh water out into Bear River Bay, while creating artificially hyper saline areas of water in important wildlife habitat.

■ **Cumulative impacts:**

- Of particular concern are the cumulative impacts of the proposed expansion on all public trust values – navigation, wildlife habitat, aquatic beauty, public recreation and water quality. Factors such as increased storm water run off, increased recreation, and increased near-lake development all also have cumulative adverse impacts on public trust resources.
- In 2007, the Division approved the 33,000 acre expansion proposal, which includes the 8,000 acres in Bear River Bay. Therefore, adding the 23,000 acres of expansion outside of Bear River Bay to the current 37,000 acre proposal means that Mining Company is planning on increasing the footprint and scope of its current mining operations by at least 70,000 acres, 8,000 of which are in Bear River Bay. In addition, Mining Company currently operates 43,000 acres of facilities on Great Salt Lake sovereign lands. The cumulative adverse impact on public trust resources of these existing, approved and pending operations is necessarily significant, although not understood. These impacts must be cataloged and analyzed prior to any approval of the 37,000 leasing request.
- There are currently ten producing mineral leases totaling 171,644 acres operating within Great Salt Lake. Like the Mining Company expansion proposal, these operations involve diking and industrialization and the destruction of huge swaths of the Great Salt Lake Ecosystem. In addition, areas of the bed of Great Salt Lake are currently leased for oil and gas development and there exists a keen interest in the leasing of tens of thousands of additional acres for oil and gas development. These activities will certainly have adverse cumulative adverse effects on public trust resources – impacts which have not been quantified or otherwise examined.

■ Other considerations – seismic activity:

- The lands being offered for lease lie just a few miles from the epicenter of the largest instrumentally recorded earthquake in Utah history, the Hansel Valley Magnitude 6.5 event of 1934. At the same time, the lease parcels lie adjacent to or above an even more dangerous fault – the Great Salt Lake fault – that runs submerged immediately west of Promontory Peninsula and “generates earthquakes up to at least Magnitude 7.0.” Because the shaking and tsunami that would accompany any rupture of these faults is capable of causing catastrophic failure of even earthquake-strengthened structures, there is the potential of serious damage to both on shore and off-shore facilities. The failure of these facilities would adversely impact public trust resources.

6. The Relinquishment Is Not Understood and Does Not Alleviate the State’s Public Trust Obligations.

There are many unknowns about the purported lease relinquishment, and the alleged benefit of this action is not understood or quantified. For example, a significant portion of the relinquished lands appear to be in areas open not only to mineral salts development, but to other types of development. Therefore, there is no guarantee that any long lasting benefit to public trust resources will be achieved as a result of the purported relinquishment. Moreover, the values preserved or advanced by the relinquishment must be carefully understood, analyzed and disclosed to the public, as well as to relevant state and federal agencies. Finally, the proposal must include details of the terms and conditions, payment history and other information relative to the leases so that the public and state and federal agencies can understand the implications of the proposed action.

In any case, while the impacts on trust resources of the proposed 37,000 acre expansion are not known, it is certain that these effects are likely to be significant. As a result, the leasing proposal must be analyzed thoroughly, regardless of any attendant relinquishment. Only in this way can the State determine whether the planned leasing and development would interfere with public trust resources and therefore violate the public trust doctrine.

7. The Division and RDCC Must Gather and Analyze Sufficient Information to Establish Lease Stipulations and to Determine Whether Leasing Impairs Public Trust Values.

As established above, under the relevant statute, regulations, and provisions of the CMP and MLP, the Division, assisted and advised by the RDCC, and in some cases the Division of Wildlife Resources, has the obligation to:

- Safeguard navigation, fish and wildlife habitat, aquatic beauty, public recreation, and water quality of and on Great Salt Lake and ensure any use of Great Salt Lake, including diking and conversion, do not “interfere” with the protection of these values.
- Undertake site-specific planning relative to the proposed expansion that, among other things, must evaluate the impacts of the diking and conversion project on public trust values. This in turn requires ensuring that:

- leasing and development of the 37,000 acres in Clyman Bay does not interfere, either individually or cumulatively, with the protection of public trust values; and
- development of the 8,000 acres in Bear River Bay does not interfere, either individually or cumulatively, with the protection of public trust values.

This analysis must be sufficiently detailed and thorough to allow compliance with public trust obligations and must occur prior to any commitment by the State of Utah to allow this proposed development of the bed of Great Salt Lake. Moreover, even if the entire 37,000 acre proposal were subject to environmental review by the U.S. Army Corps of Engineers, it is incumbent upon the State of Utah to fulfill its public trust obligations to guarantee that uses of Great Salt Lake sovereign lands will not interfere with public trust values.⁹

At the very least, at this stage in the leasing process, the MLP requires that new leases on Great Salt Lake “address significant resource issues,” including navigability, bonding and reclamation, requirements for cultural and biological surveys and “monitoring requirements to track and measure long term impacts of each operation on the lake’s ecosystem.” MLP at 45. At the same time, RDCC as well as the Great Salt Lake Technical Team are to be consulted and management decisions coordinated with these entities. MLP at 45. Analysis is necessary so that the Division and RDCC can establish sufficiently protective lease stipulations and restrictions prior to offering these sovereign lands for competitive leasing, or – if no stipulations could be sufficiently protective – to decide not to offer the lands for leasing.

Moreover, to the extent that offering the leases in any way binds the State of Utah to allowing any construction and conversion on the leased lands, we contend that action on the nominations must be postponed until the Division and RDCC members have sufficient information to enable them to make decisions in compliance with their public trust obligations.

⁹ The Division repeatedly suggests that it need not comply with its planning obligations or undertake thorough analysis of the impacts of the expansion project on public trust resources because the U.S. Army Corps of Engineers will be completing an environmental impact statement pursuant to its 404 permitting obligations. There are two significant flaws with this attempt to rely on the Corps to conduct analysis which the Division itself is legally obligated to do. First, unlike the Division, the Corps is not entrusted to protect Great Salt Lake’s public trust values, but is guided by a different set of legal obligations. See e.g. 40 C.F. R. § 230.1 (purpose of section 404 of Clean Water Act, 33 U.S.C. § 1344, is “to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material”). Second, the Corps’ analysis is not yet begun, yet even in its absence the Division has already made its decision to lease the Clyman Bay parcels to Mineral Company and to refuse to apply the Public Trust Doctrine to the existing Bear River Bay leases. Finally, the relevant regulations are clear that the Corps will rely extensively on state analysis and comment in all aspects of the Corps’ permitting process. See 33 C.F.R. § 320.4. Therefore, the state will be neglecting its role in the Corps process if it waits for that agency to undertake environmental analysis to understand the impacts of the project. More importantly, the state’s dependence on the Corps is circular, as that federal agency is relying on the state to ensure the project complies with the state’s own law. See 33 C.F.R. § 320.4(j).

8. Additional Obligations with Regard to Existing Bear River Bay Leases

As the Mining Company has explained, it also intends to expand its industrial operations to include 8,000 acres of critically important wildlife habitat in Bear River Bay. At the same time, the Mining Company is seeking to increase its mining facilities by an additional 62,000 acres – 37,000 acres under the current proposal and 25,000 acres under its 2007 plan. The Mining Company also explains that all salts concentrated outside of Bear River Bay are eventually brought to the Bay for further processing in the evaporation ponds located there. Huge volumes of salts and other residue that remain are then flushed into Bear River Bay. This makes clear that the diking of Bear River Bay is an integral part of the Mining Company's 62,000 acre expansion, and should be analyzed as such.

Moreover, the 37,000 acre expansion currently before RDCC will necessarily have adverse impacts on Bear River Bay. This means that the required analysis of the proposal must include consideration of the impacts to Bear River Bay. However, the Bear River Bay leases slated for development were issued in the mid-1960s and have not been subject to any environmental analysis or planning, much less any determination whether leasing and development of these lands is in keeping with the State of Utah's public trust responsibilities. Because these responsibilities must be met and public trust values must be protected, we point out various opportunities which will allow the Division particularly, and the State of Utah generally, to fulfill its public trust duties relative to these lands. We urge the Division and RDCC members to take advantage of these mechanisms so that they can comply with their obligation to safeguard the sovereign lands of Great Salt Lake.

As reiterated above, there appears to be no information, studies, data or analysis quantifying the impacts that the construction and operation of the existing Mining facilities and other mineral salt extraction projects already have on public trust values. This includes the operation of 22,000 acres of evaporation ponds in sensitive Bear River Bay, a critically important habitat for waterbirds. The impacts of these east side operations will be increased because the Mining Company has plans to develop 62,000 acres in Clyman Bay. The Mining Company itself describes how the expansion on the west side of the lake will increase the concentration of brine transported to the East Ponds, where the proposed 8,000 acre expansion in Bear River Bay will increase the potassium harvest from those ponds – and therefore that the west side expansion is connected to the expansion in Bear River Bay. At the same time, the 37,000 acre expansion increases the likelihood that the 8,000 acres diking project will go forward.

Without any baseline data for existing impacts from the current operations of Great Salt Lake Minerals, including the development in Bear River Bay – and thus without knowing the extent to which current mineral leasing is adversely impacting public trust resources – the Division cannot be in a position to evaluate whether expansion of these operations will negatively affect navigation, wildlife habitat, aquatic beauty, public recreation, and water quality. However, given the sheer magnitude of current operations, and the proposed expansion to nearly double the amount of the lake surface substantially altered by these evaporation ponds, it is almost certain that – cumulatively – these diking and conversion operations are impairing the public trust resources.

Of course, because of the similarity of the west and east side expansion proposals, the likely impacts described above apply equally to the Bear River Bay expansion. Noting that some concerns listed below are similar to those above, the following are issues relevant to the individual and cumulative impacts and impairments that will almost certainly result from the proposed diking and conversion expansion, focusing particularly on the resulting impacts to Bear River Bay:

■ **Impacts to all public trust values:**

- When added to existing development in Bear River Bay – one of the most critical habitats for waterbirds on the Great Salt Lake – the proposed diking and conversion expansion would cover 30% of this critical ecosystem in dikes and largely sterile evaporation ponds. This is because currently, Great Salt Lake Mineral has diked and converted 22,000 acres of the bay. If this development is increased by 8,000 acres, 30,000 acres of the 100,416 acre bay will be diked, converted and developed, causing significant adverse impacts to the whole suite of public trust values. It is impossible not to impair significantly public trust values, when 30% of one of the most critical areas of the lake is essentially taken out of the trust and converted into an industrial zone and deprived of each of the very qualities that make up the trust.

■ **Impacts on navigation and public recreation:**

- The 8,000 acre expansion proposal will, at times, cut off water flows and access to and from Bear River Bay. This will severely limit the ability of the public to recreate freely on the lake and will concentrate public use in a smaller area. This in turn will adversely impact navigation and recreation in these remaining smaller areas.
- To the extent increased diking and conversion will adversely affect water birds and wildlife, as well as scenic values, public recreation that depends upon these values will be adversely impacted.
- Impacts to navigation and public access will be exacerbated by low water as lake volume decreases and the shoreline shrinks.
- Increased diking and conversion will further impede navigation and access from one part of the bay to the other – access which is already significantly impaired by existing diking and conversion.

■ **Impacts on wildlife habitat:**

- An August 28, 1998 letter from the Division and the Division of Wildlife Resources, as well as a predecessor to the current company, Great Salt Lake Minerals Corporation, regarding a decision to exchange leased lands in Bear River Bay states plainly that the State of Utah considers the areas subject to diking and conversion as significant wildlife habitat:

DWR [Division of Wildlife Resources] expressed interest in an exchange because the undiked areas of Bear River Bay have tremendous value to wildlife, specifically birds. Some of the values include: molting/brood rearing areas for Canada geese and ducks; a foraging area for fish eating birds such as pelicans, cormorants, western grebes, [and] great blues herons; [and a] horned grebe nesting colony.

Memo from IMC Kalium Ogden Corp., Division of Wildlife Resources, Division of Forestry, Fire and State Lands to John Kimball, Director Division of Wildlife Resources and Arthur DuFault, Director Division of Forestry, Fire and State Lands, August 28, 1998 at page 2. A copy of this letter is attached to these comments. With regard to some of the particular parcels slated for diking and conversion, the agency stated:

DWR also identified lands of important wildlife value in Sections 16, 17 and 18, Township 7 North, Range 4 West. These lands were not included in the lease exchange but are valued by DWR for periods when lake level falls below 4200' in Bear River Bay.¹⁰ DWR is particularly interested in lands which are north and northwest of the existing dikes of IMC Kalium because of bulrush colonies in this area that are important to colony nesting birds and as forage for birds. Also, at lower lake levels, this is the low point of the channel and is important as an area where the water creates a natural "lake" within the bay. IMC Kalium values these same sections for possible pond expansion but believes that by increasing its pond size in Clyman Bay, these sections will probably never be needed. IMC Kalium, BWR and DFFSL [the Division] are, as a result, now aware of areas of concern or potential resource conflicts that might arise in the future.

Id. at 3. Plainly, DWR anticipates that diking and conversion of these areas of Bear River Bay will threaten public trust values. Indeed, these statements show that the proposed expansion will interfere with and significantly impair the public trust.

- Other statements echo that Bear River Bay is of critical importance to waterbirds. As the Department of Natural Resources has confirmed:

Bear River Bay is the freshest region and receives the largest volume of riverine inflow. Its near-surface salinity is similar to that of the Bear River. This system is bounded on the north and east by state, federal, and private wetlands; on the south by industry; and to the west by the Promontory Mountains. This bay is fresh enough to support a community of submergent hydrophytes including sago pondweed (*Potamogeton pectinatus*) and widgeon grass (*Ruppia maritima*). There are significant islands of emergent wetlands here, especially in the east part of the bay in the Willard Spur. . . . An

¹⁰ As of April 24, 2007, the level stood at 4197 feet. The level has been below 4198 feet for at least the last three years.

ecological element of vital importance to piscivorous birds in this area is the fishery that persists when the lake elevation is higher than 4,200 feet (1,280.2 m) above sea level. The avian community at Willard Spur is exceptionally complex. With its species richness, diversity and overall abundance, this area continually provides one of the most magnificent displays of bird life on the lake. Although the smallest region on the lake, it makes an exceptional contribution to the lake's avian population.¹¹

Because of the importance of this water body to wildlife habitat, particularly close examination of the impacts of the current and proposed expansion on ecosystem values must be undertaken.

- The Great Salt Lake Waterbird Survey, conducted from 1997 to 2001, confirms the conclusions reached by the Division of Wildlife Resources. This survey was undertaken in 12 different areas of the total Bear River Bay complex, including the Bear River Refuge, Public Shooting Grounds, and Bear River Club. The surveys occurred numerous times from early spring through fall during these five years. The survey underscores the importance of Bear River Bay to waterbirds. A map of these survey areas is attached, along with some of the bird counts data.
- As noted above, Bear River Bay is of critical importance to Canada geese, huge numbers of which use the area for molting. The Utah Division of Wildlife Resources has conducted aerial surveys of Canada Geese in June in the open water of Bear River Bay since 1972. The highest count was 11,893 in 1998. The impacts to these molting geese due to an expansion of the mineral ponds in Bear River Bay are not known. What is of concern is the reduction in habitat and also the potential decrease in available wet areas, particularly in lower water years. This reduction in habitat could result due to direct loss in diked areas, as well as water quality impacts due to increased evaporation and reduced circulation.
- Increased diking and conversion will likely adversely impact wildlife and habitat due to noise and increased access of predators and humans across dikes.
- Any impact to wildlife habitat caused by increased diking and conversion is likely to be exacerbated by low water.
- Adverse impacts to water quality and decreases in water quantity will adversely affect wildlife and wildlife habitat.

■ **Impacts to aquatic beauty:**

- Diking and conversion change a natural setting into an industrialized setting. Thus, the impact of the proposed expansion on the aquatic beauty of Great Salt Lake is extensive. Cumulatively, this impact is even more significant, as a significant portion of the lake is currently developed. Moreover, Bear River Bay is closer to the more widely used east shore of the lake and experiences more use.

¹¹ *Avian Ecology of Great Salt Lake*, by Tom Aldrich and Don Paul from Great Salt Lake: An Overview of Change, edited by J. Wallace Gwynn, Ph.D., Special Publication of the Utah Department of Natural Resources, 2002.

As a result, the significant adverse impacts to aquatic beauty will be experienced by more people.

■ **Impacts to water quality, water movement and water quantity:**

- The proposed expansion would result in the diking and conversion of a total 30,000 acres of Bear River Bay into essentially sterile evaporation ponds. Diking and conversion impacts water quality because it will interfere with the natural ebb and flow of the lake, as well as the mixing of the lake's waters. Indeed, the 8,000 acre expansion proposal appears to essentially cut off water flows and access to and from Bear River Bay, particularly when water levels are low, as they currently are. In addition, as the Division of Wildlife Resources made plain, this area is important at low water levels because it creates a natural lake within the bay. IMC Kalium/DWR Memo, August 28, 1998 at 3. The effects of this expanded development on water quality, together with the effects of current development, will be significant. Specifically, circulation of fresh water, so critical to the Great Salt Lake Ecosystem, will be impeded, especially during low water years. Since the open water of Willard Spur is an extremely valuable area for water birds, the potential adverse impacts are certain and must be fully explored, based on flow patterns during low as well as high water years.
- Mineral salts extraction changes the chemistry of the waters of Great Salt Lake, at the very least, on a local level. These changes – including the effects of increased concentrations of some minerals and decreased concentrations of others – and the impacts these changes may have on the biota of the lake have never been analyzed. Changes to water chemistry, both due to current mineral extraction and due to the impacts of increased extraction should be addressed, particularly as these changes impact algae, brine flies, brine shrimp and water birds.
- Diking and the operation of solar evaporation ponds will increase evaporation from the lake with unknown impacts to water availability, water quality, wildlife habitat, wetlands and mud flats.
- The expansion proposal will greatly increase the ongoing shift of minerals between Gunnison Bay and Bear River Bay. A full understanding of these possible shifts in minerals and their impacts to the various bays should be developed, including whether the movement of water and minerals could concentrate mercury or selenium in the receiving waters or in the waters from which the minerals and water are being removed. These effects should be quantified and analyzed.
- Drought and low water will further exacerbate the water quality impacts of current and proposed operations. In addition, as the population of the Wasatch Front increases, there will be more demand for fresh water and less water reaching Great Salt Lake.
- Construction of the dikes will disturb lake bed sediments and stir up contaminants. In addition, the use of motors, motorized vehicles and other equipment as a result of the development could adversely impact water quality.

- Pumps, underwater canals, water intake points and discharge points all impact water quality, individually and cumulatively. Flushing of solar ponds impacts water quality by forcing into specific parts of the lake waters containing a high concentration of unspecified minerals.
- Removal of extremely high volumes of water from the open waters of the lake and sequestering them in essentially sterile evaporation ponds affects water quality and quantity available to the Great Salt Lake Ecosystem. Moreover, increased evaporation of waters from the lake which will result from the construction of ponds, will also impact these values. This loss of water could lower lake levels thereby further concentrating pollutants, further restricting natural water flows as well as public access.

As set forth above, the Division of Wildlife Resources attaches particular value to Bear River Bay:

the undiked areas of Bear River Bay have tremendous value to wildlife, specifically birds. Some of the values include: molting/brood rearing areas for Canada geese and ducks; a foraging area for fish eating birds such as pelicans, cormorants, western grebes, [and] great blues herons; [and a] horned grebe nesting colony.

IMC Kalium/DWR Memo, August 28, 1998 at 2. Indeed, with regard to some of the particular parcels slated for diking and conversion, the agency further underscored the “tremendous” importance of these lands:

These lands were not included in the lease exchange but are valued by DWR for periods when lake level falls below 4200' in Bear River Bay. DWR is particularly interested in lands which are north and northwest of the existing dikes of IMC Kalium because of bulrush colonies in this area that are important to colony nesting birds and as forage for birds. Also, at lower lake levels, this is the low point of the channel and is important as an area where the water creates a natural “lake” within the bay.

Id. at 3.

As further exemplified by these statements, expansion of the existing 22,000 acres of diked evaporation ponds in Bear River Bay by an additional 8,000 acres will interfere with and seriously impair public trust values in the bay. As a result, the Division and the Division of Wildlife Resources are duty bound to prevent this development regardless of fact that leases have been issued for these parcels. This is particularly true because there has been no public trust analysis or evaluation conducted relative to these leases and no assurances in place that the public trust will be protected.

However, various opportunities exist to allow compliance with the public trust. First, the MLP envisions that the Division will “[e]valuate opportunities for trading existing leases with significant resource conflicts for the right to lease in areas with less conflict.” MLP at 45 (emphasis added). In the Decision Document for the CMP, the Division states:

Much of the public comment reflected a desire for a blanket ban on new dikes. There is no question about the adverse affects of some dikes, but other dikes serve public purposes as well as public uses protected under the Public Trust Doctrine. A blanket ban is inappropriate, but better evaluation of diking proposals is needed than has occurred in the past.

CMP Decision Document, Record of Decision at 7.¹²

Thus, the MLP and the CMP Decision Document require, at a minimum, an examination of diking and an evaluation of opportunities to exchange leased parcels in sensitive areas. Based on statements by the Division of Wildlife Resources, full compliance with these directives is mandated with regard to the Bear River Bay parcels.

At the same time, the relevant leases for the Bear River Bay parcels (21708-SV, 22782-SV, 24631-SV, and 25859-SV) each contain the following provision as Article I:

This lease is granted subject to the laws of the State of Utah, existing regulations of the State Land Board and such reasonable operating regulations as may hereafter be promulgated by said board.

Thus, the Bear River Bay leases themselves incorporate the State's constitutional, statutory and regulatory public trust obligations and the requirement that leasing and uses of the bed of Great Salt Lake not interfere with public trust values. Therefore, actions taken by the Division and other state agencies to ensure compliance with these statutory and regulatory mandates are expressly anticipated by the terms of the existing Bear River Bay leases. This in turn triggers the State's responsibility to acquire and analyze information sufficient to guarantee adherence to these requirements.

Finally, the Preamble of lease 25859-SV – the lease for the most northern Bear River Bay parcels – states as a term of the lease, the

condition that at the end of each twenty (20) year period succeeding the first day of the year in which this lease is issued, such readjustment of terms and conditions may be made as the lessor may determine to be necessary in the interest of the State.

As the lease was issued in 1968, the State of Utah, as the lessor, is in a position to change the terms of this lease, effective January 1, 2008. Given the public trust obligations and the

¹² See also CMP Decision Document at 78 (“The general effect of dikes on lake dynamics is acknowledged. The policy will require a more specific assessment. Blanket denial of diking proposals is not appropriate because it would preclude construction of dikes in [Wildlife Management Areas], the sovereign land portion of [Bear River Migratory Bird Refuge], and existing mineral leases. Diking proposals in these areas will be subject to the policy.”); CMP at 19 (“6.4 GSL diking policy. Given the increased appreciation for habitat-related beneficial effects of fluctuating lake levels, the objective is to ensure that on-site and off-site impacts will be taken into account when diking activity is planned.”).

requirement that leasing and uses of the bed of Great Salt Lake not interfere with public trust values, such a change in terms and conditions is obligatory. This in turn implicates the need to acquire and analyze information sufficient to guarantee adherence to these requirements.

Thus, based on the relevant planning documents and existing leases, the Division and other state agencies have a chance to do what they are required to do – safeguard public trust values from any adverse impacts resulting from the development of the Bear River Bay parcels. We urge the Division and the other RDCC members to take full advantage of these opportunities.

9. Conclusion

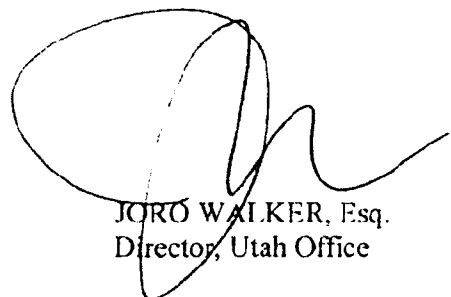
Based on the above, we reiterate the need for the Division and the RDCC members to acquire new information and analyze the information they have to ensure the proposed diking and conversion expansion will not harm the public trust values they are statutorily mandated to protect. We have set forth in detail the concerns, including those identified by the Division and other state agencies that must be addressed in this public trust analysis. Until this information is gathered and examined, we ask that the proposal to lease the 37,000 acres in Clyman Bay be rejected.

At the same time, we urge the Division, the Division of Wildlife Resources and the other RDCC members to exercise their public trust authority to halt impending development of the Bear River Bay leases. At a minimum, prior to any development, sufficient information must be gathered and analyzed to assess impacts of the diking and conversion, both individually and cumulatively, on public trust values in this most sensitive and important area. Based on an understanding informed by this review, we ask that the state agencies take the steps necessary to protect the public trust and safeguard Bear River Bay.

Only in these ways can the State of Utah ensure that the diking and industrialization proposal does not interfere with and does not impair navigation, fish and wildlife habitat, aquatic beauty, public recreation, or water quality in Great Salt Lake.

10. Request for Opportunity to Address RDCC

Finally, we formally request the opportunity to address RDCC during one of the committee's meetings so that we may present our concerns and respond to any questions. We ask that we be given this opportunity before any decision is made on the leasing proposal.



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cc: clients

